

Appln No. 10/660,453
Amdt date January 27, 2010
Reply to Office action of September 29, 2009

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A space keeper for vertebrae or intervertebral disks comprising:
a tube having a first end, a second end and an outer wall, and having a longitudinal axis extending from the first end to the second end and a bore extending along the longitudinal axis through the tube, wherein the outer wall of the tube has a plurality of openings extending transversely through the outer wall to the bore, and wherein a pattern of the plurality of openings is repeated in the outer wall along the longitudinal direction;

a base plate connected with the first end of the tube, the base plate having a first section extending past the first end of the tube away from the second end of the tube in the longitudinal direction; [[and]]

a top plate connected with the base plate and configured to engage a vertebral body end plate, wherein the top plate is tiltable relative to the first section of the base plate about an angle to the longitudinal axis of the tube; and

an elastic member located between the top plate and the base plate to cushion the prosthetic,

wherein the base plate comprises a second section that extends in a direction away from the top plate and that engages with the tube.

2-3. (Cancelled)

4. (Previously Presented) The space keeper of claim 1 wherein the openings of the tube are lozenge-shaped.

5. (Currently Amended) The space keeper of ~~claim 2~~ claim 1 wherein the top plate has teeth extending in the longitudinal direction to engage a vertebral body end plate.

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6. (Withdrawn - Currently Amended) The space keeper of claim 1, wherein the base plate defines a convex contact face and a first annular recess; the top plate defines a concave recess and a second annular recess wherein the concave recess is congruent with the convex contact face; and the ~~space keeper further~~ elastic member comprises a ring that is located between the first annular recess and second annular recess wherein the ring contacts the first annular recess and second annular recess.

7. (Withdrawn - Currently Amended) The space keeper of claim 1 wherein the base plate defines a concave contact face and a first annular recess; the top plate defines a concave recess and a second annular recess; and the space keeper further comprises[[:]] a biconvex shaped core positioned between the base plate and the top plate, the core defining a [[top]]base convex face and a [[base]]top convex face that engage the concave contact face and concave recess, respectively, the core also defining a top annular recess and a base annular recess; ~~and,~~ wherein the elastic member comprises a first ring located between the first annular recess and base annular recess and a second ring located between the top annular recess and second annular recess.

8. (Withdrawn - Currently Amended) The space keeper of claim 1 wherein the base plate defines a concave contact face; the top plate defines a concave recess; and the space keeper further comprises:

a core comprised of a top plan-convex lenticular body defining a top convex face, a base plan-convex lenticular body defining a base convex face, and the elastic member comprising a plan-parallel plate between the top plan-convex lenticular body and base plan-convex lenticular body, the core defining a bore, said top convex face engaging the concave recess and said base convex face engaging the concave contact face; and

a connecting sleeve located within the bore wherein the connecting sleeve connects the top plate with the base plate.

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9. (Withdrawn - Currently Amended) The space keeper of claim 1 wherein the base plate defines a concave contact face; the top plate defines a concave recess; and the space keeper further comprises:

a core comprised of a top plan-convex lenticular body defining a top convex face and a first annular recess, a base plan-convex lenticular body defining a base convex face and a second annular recess, said top convex face engaging the concave recess and said base convex face engaging the concave contact face, the core also defining a bore; and

a connecting sleeve located within the bore wherein the connecting sleeve connects the top plate with the base plate; ~~and,~~

wherein the elastic member comprises a ring located between the first annular recess and second annular recess.

10. (Withdrawn - Currently Amended) The space keeper of claim 1 wherein the base plate defines a flat face; the top plate defines a concave recess; and the space keeper further comprises:

a core comprised of a plan-convex lenticular body defining a top convex face and the elastic member comprising a plan-parallel plate, said top convex face engaging the concave recess and said plan parallel plate being located between the flat face and the plan-convex lenticular body, the core also defining a bore; and

a connecting sleeve located within the bore wherein the connecting sleeve connects the top plate with the base plate.

11. (Withdrawn - Currently Amended) The space keeper of claim 1 wherein the base plate defines a flat face having a first annular recess; the top plate defines a concave recess; and the space keeper further comprises:

a core comprised of a plan-convex lenticular body defining a top convex face and a second annular recess, said top convex face engaging the concave recess, the core also defining a bore; and

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a connecting sleeve located within the bore wherein the connecting sleeve connects the top plate with the base plate; and,

wherein the elastic member comprises a ring located between the first annular recess and second annular recess.

12. (Currently Amended) A ~~The space keeper for vertebrae or intervertebral disks of~~ claim 1, further comprising:

~~a tube having a first end and a second end, a longitudinal axis extending from the first end to the second end, and a bore extending along the longitudinal axis through the tube, wherein a plurality of openings extend transversely through the tube to the bore, and wherein a pattern of the plurality of openings is repeated in the tube along the longitudinal direction;~~

~~a first element proximate to the first end of the tube wherein the first element has a base plate connected with the first end of the tube, a top plate connected with the base plate and configured to engage a vertebral body end plate, and an elastic member located between the top plate and the base plate, wherein the base plate includes a first section extending past the first end of the tube away from the second end of the tube in the longitudinal direction; and~~

~~a second element proximate to the second end of the tube wherein the second element has a second base plate connected with the second end of the tube, a top plate connected with the base plate and configured to engage a vertebral body end plate, and an elastic member located between the top plate and the base plate, wherein the second base plate includes having a first section extending past the second end of the tube away from the first end of the tube in the longitudinal direction; and~~

a second top plate connected with the second base plate and configured to engage another vertebral body end plate, wherein the second top plates are plate is tiltable relative to the first section[[s]] of the ~~corresponding~~ second base plate[[s]] about an angle to the longitudinal axis of the tube,

wherein ~~each of the~~ second base plate[[s]] comprises a second section that extends in a direction away from the ~~corresponding~~ second top plate and that engages with the tube.

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13-14. (Cancelled)

15. (Currently Amended) The space keeper of claim 12 wherein ~~each~~ the second top plate has teeth extending in the longitudinal direction to engage ~~[[a]]~~ another vertebral body end plate.

16. (Previously Presented) The space keeper of claim 1 wherein the pattern of the plurality of openings forms a grid pattern in the outer wall.

17. (Previously Presented) The space keeper of claim 16 wherein the grid pattern is repeated along the longitudinal direction.

18. (Previously Presented) The space keeper of claim 17 wherein the total area of open portions in the tube exceeds the total area of wall portions.

19. (Previously Presented) The space keeper of claim 5 wherein the second end of the tube has teeth extending in the longitudinal direction to engage a second vertebral body end plate.

20. (Previously Presented) The space keeper of claim 1 wherein the tube is a cylindrical casing.

21. (Previously Presented) The space keeper of claim 1 wherein the second section of the base plate extends inside the bore of the tube.

22. (Previously Presented) The space keeper of claim 21 wherein the first end of the tube abuts the first section of the base plate.

23. (Previously Presented) The space keeper of claim 1 wherein the pattern of the plurality of openings is continuously repeated in the outer wall along the longitudinal direction from the first end to the second end.

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24. (Previously Presented) The space keeper of claim 1, wherein the pattern of the plurality of openings comprises a first row of openings, and wherein the pattern of the plurality of openings is repeated as a second row of openings adjacent the first row of openings in the longitudinal direction and staggered with respect to the first row of openings.